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**REMOVAL SITE EVALUATION
RECONSTRUCTION OF THE BOILER HOUSE
ELEVATION 656'6" AUGUST 1992**

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DOE/WEMCO

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**REMOVAL SITE EVALUATION
RECONSTRUCTION OF THE BOILER HOUSE ELEVATION 656' 6"**

**Fernald Site Office
U. S. Department of Energy**

AUGUST 1992

REMOVAL SITE EVALUATION**RECONSTRUCTION OF BOILER HOUSE ELEVATION 656' 6"****INTRODUCTION**

This project consists of the removal of structural steel, steel decking, and transite asbestos siding, and miscellaneous electrical conduit and fixtures that were damaged during the Boiler House bunker coal fire on January 20, 1992. The area of construction known as the coal gallery, elevation 656' 6", has never been used for the production of uranium or thorium. There were no hazardous materials stored or spilled in the construction area prior to or as a result of the fire.

This project also consists of installing a new underground fire line on the east side of "B" Street, starting north of the Tank Farm and extending north past the Boiler House to tie-in to an existing main line. The installation of the new fire line will generate concrete and asphalt waste, and wood waste such as railroad ties and shoring material. This waste will be generated wherever the line is installed in a presently paved area or railroad crossing. Any soil and gravel excavated will be used as backfill.

This Removal Site Evaluation (RSE) has been completed by the Department of Energy (DOE) under authorities delegated by Executive Order 12580 under Section 104 of CERCLA and is consistent with Section 300.410 of the National Oil and Hazardous Substance Pollution Contingency Plan (NCP). This RSE addresses the construction and demolition activities related to products that are part of the Boiler House structure. It has been completed to support the decision as to whether the present conditions warrant a removal action.

SOURCE TERM

Consistent with Section 40 CFR 300.410 (a) of the NCP, the removal site evaluation includes a removal preliminary assessment which may be based on readily available information as described in 40 CFR 300.410 (c).

Sampling and analysis was not required for the RCRA determination due to the process knowledge available for this project.

Reference:

WEMCO:EM(FME):92-130, C. G. Rieman to D. T. Edwards, "RCRA Determination and Radiological Characterization for the Reconstruction of Boiler House Elevation 656 Feet", dated March 27, 1992.

WEMCO:EM(FME):92-229, C. G. Rieman to D. T. Edwards, "Addition RCRA Determination and Radiological Characterization for the Reconstruction of Boiler House Elevation 656 Feet", dated May 20, 1992.

WEMCO:EM:RCRA(RME):92-020, C. G. Rieman to D. T. Edwards, "RCRA Determination and Radiological Characterization for the New Fire Line to the Boiler House, dated August 4, 1992.

The structural steel and steel decking waste, and transite siding which contains asbestos is RCRA nonhazardous (a.k.a. non-RCRA) waste.

The lead washers, anchors, and flashing waste is a RCRA hazardous waste. The lead waste may be disposed of as RCRA D008 waste.

The rubble waste (concrete and asphalt), and wood waste (railroad ties and new material or shoring) is RCRA nonhazardous (a.k.a. non-RCRA) waste.

The waste material (metal, electrical conduit, light fixtures, junction boxes, wire, electric motors, ventilators, plastic, cardboard, paper, and work clothes) are RCRA nonhazardous (a.k.a. non-RCRA) waste if the conditions specified in the RCRA Determinations referenced above are met.

Radiological Survey Reports of the coal bunker made after the fire determined that all readings were less than minimum detectable amounts (MDA), measured as DPM/100 cm² Beta-Gamma Fixed Plus Removable.

EVALUATION OF THE MAGNITUDE OF THE POTENTIAL THREAT

1. The metal is considered uncontaminated based on the most recent radiological data obtained from Radiological Survey Report dated February 2, 1992. The structural material removed will be resurveyed in accordance with SP-P-35-010 "Unrestricted Release of Materials from FMPC". If the structural steel removed is found within free-release limits it can be sold as scrap metal.
2. Based on process knowledge the construction waste is not regulated by RCRA, except for the lead washers and flashings. A Material Evaluation Form (MEF) will be written for the lead. It will be appropriately containerized after removal and stored in the RCRA warehouse. If the lead is not radiologically contaminated attempts will be made to recycle the material.

ASSESSMENT OF THE NEED FOR REMOVAL ACTION

Consistent with Section 40 CFR 300.410 and 40 CFR 300.415 (B)(2) of the NCP, the Department of Energy shall determine the appropriateness of a removal action. Eight factors to be considered in this determination are listed in 40 CFR 300.415 (b)(2).

Based on the sampling data presented herein, none of the eight factors listed in the NCP are applicable to "The Reconstruction of the Boiler House Elevation 656' 6".

Consistent with Section 40 CFR 300.400 (b) *Limitations on response*, a removal action or remedial action under section 104 of CERCLA shall not be undertaken in response to a release:

(2) From products that are part of the structure of, and result in exposure within, residential buildings or business or community structures.

APPROPRIATENESS OF A RESPONSE

Consistent with Section 40 CFR 300.410 (e) a removal site evaluation shall be terminated when the OSC or lead agency determines one is not required.

The following factors apply specifically to the Reconstruction of the Boiler House El. 656' 6":

40 CFR 300.410 (e)(1)

There is no release;

40 CFR 300.410 (e)(2)

The source is neither a vessel nor a facility as defined in 300.5 of the NCP;

If it is determined that a response action is appropriate due to the presence of a release or possible release a removal action may be required to address the existing situation.

If a planning period of less than six months exists prior to initiation of a response action, DOE will issue an Action Memorandum. The Action Memorandum will describe the selected response and provide supporting documentation for the decision.

If it is determined that there is a planning period greater than six months before a response is initiated, DOE will issue an Engineering Evaluation/Cost Analysis (EE/CA) Approval Memorandum. This memorandum is to be used to document the threat of public health and the environment and to evaluate viable alternative response actions. It will also serve as a decision document to be included in the Administration Record.

Based on the evaluation of all the above factors, it has been determined that existing controls for the planned action are adequate and a removal action is not required.



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From: C. G. Rieman\6828

WEMCO:EM:RCRA(FME):92-020

Date: August 4, 1992

Subject: RCRA DETERMINATION AND RADIOLOGICAL CHARACTERIZATION FOR THE NEW FIRE LINE TO THE BOILER HOUSE

To : D. T. Edwards

- Ref: 1. WEMCO Site Standard Operating Procedure, SSOP-0044, "Management of Soil, Debris and Waste from a Project", issued June 10, 1992
2. WEMCO Safety Procedure SP-P-35-010, "Unrestricted Release of Materials From FMPC", issued March 13, 1990
3. Environmental Compliance Spill/Release Incident Tracking Report, Dated July 21, 1992
4. Upset Condition Documentation, issued September 18, 1990

This memo transmits the RCRA determination and radiological characterization for the waste to be generated from this project. The waste to be generated consists of 1000 cubic feet of rubble (concrete and asphalt), approximately 125,000 pounds wood (railroad ties), approximately 500 pounds, wood (shoring) approximately 100 pounds, and approximately 60 cubic feet of plastic, paper, cardboard, and protective clothing (anti-C, rubber gloves, etc.).

PROCESS KNOWLEDGE

This project is located in the controlled area of the FEMP on the east side of "B" Street, north of the tank farm (Fire Line FQ1-17-8"-L1) to north of the Boiler House (Fire Line FQ1-4-12"-L1), with branch lines to the Boiler House. Attachment Number I shows the location of this project.

This project will consist of installing a new 8" fire line in the location described above with 6" branch extending to the Boiler House. The soil will be excavated to a depth of approximately four feet. The soil excavated will be used as backfill and no soil will be generated from this project.

The installation of the new fire line will generate concrete and asphalt waste. Since the new line will pass under the railroad tracks, several railroad ties will also be generated as waste.

The wood waste to be generated will be new material (not pressure treated) used as shoring material in the trenches.

The plastic waste to be generated, will be from plastic sheets, used as dust barricades and plastic bags used to wrap any radiologically contaminated waste.

The cardboard and paper waste will be from off site, used to package and transport any new equipment that is to be installed.

The protective clothing to be generated (anti-C clothing, rubber gloves, etc.) will be used for worker protection, if required.

SAMPLING AND ANALYSIS

Three samples of asphalt were taken from the construction area and analyzed for TCLP VOAs and Semi-VOAs. Also two samples of the railroad ties were taken and analyzed for TCLP metals and Semi-VOAs. Analytical results are shown in Table Numbers 1 and 2.

RADIOLOGICAL CHARACTERIZATION

The waste from this project will have to be monitored by the Radiological Safety Group for proper radiological disposition per Reference Numbers 1 and 2.

RCRA DETERMINATION

The rubble waste (concrete and asphalt) to be generated from this project is RCRA nonhazardous (a.k.a. non-RCRA) based upon process knowledge and the analytical results (below TC regulatory levels) shown in Table 1.

The wood waste (railroad ties) to be generated from this project is also RCRA nonhazardous (a.k.a. non-RCRA) based upon the analytical results (below the TC regulatory levels) shown in Table 2.

The wood waste (new material) (shoring) to be generated from this project is RCRA nonhazardous (a.k.a. non-RCRA) based upon process knowledge of the material.

The plastic waste to be generated from this project is RCRA nonhazardous (a.k.a. non-RCRA), provided that it meets the conditions specified in MEF-1539, dated February 11, 1992, Attachment Number II.

The paper, cardboard and protective clothing to be generated from this project are RCRA nonhazardous (a.k.a. non-RCRA), provided they meet the following conditions.

- o Do not contain any entrapped liquids.
- o The waste material has not come in contact with any acutely toxic waste. Attachment Number II contains the list of acutely toxic wastes.

D. T. Edwards

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WEMCO:EM(FME):92-130

The transite siding which contains asbestos is a RCRA nonhazardous (a.k.a. non-RCRA) waste based upon process knowledge. Handling of asbestos containing material should be handled in accordance with WEMCO procedures OS&H-P-41-006 and IH&S-IH-03.

The lead washers, anchors, and flashing is a RCRA hazardous waste. The lead waste may be disposed of as RCRA D008.

SUMMARY

The structural steel and steel decking waste is RCRA nonhazardous (a.k.a. non-RCRA) waste.

The transite siding which contains asbestos is RCRA nonhazardous (a.k.a. non-RCRA) waste.

The lead washers, anchors, and flashing waste is a RCRA hazardous waste. The lead waste may be disposed of as RCRA D008 waste.

This determination applies only to the steel, transite, and lead washers, anchors, and flashing listed on the Construction Waste Identification/Disposition (CWID) form date January 31, 1992.

If any additional waste is generated from this project, and additional RCRA determination will be required.

If there are any questions, please contact me at extension 6828 or C. S. Waugh at extension 6777.



C. G. Rieman
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FME Files
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From: C. G. Rieman

WEMCO:EM(FME):92-130

Date: March 27, 1992

Subject: RCRA DETERMINATION AND RADIOLOGICAL CHARACTERIZATION FOR THE
RECONSTRUCTION OF BOILER HOUSE ELEVATION 656 FEET

To : D. T. Edwards

- Ref: 1. FEMP Site Standard Operating Procedure SSOP-0044I, "Controlling the Generation of Construction/Maintenance Waste", issued February 19, 1992
2. Environmental Compliance Spill/Release Incident Tracking Report, dated February 28, 1992
3. Upset Condition Documentation, issued September 18, 1990
4. WEMCO Document No. WEMCO:EC&QA(OU3/FME):91-390, "Metal Coated With Lead-Based Paint", October 23, 1991

This memo transmits the RCRA determination and radiological characterization for the construction waste to be generated for the above-referenced project. The waste to be generated consists of approximately 44,440 pounds of structural steel, approximately 12,135 pounds of transite siding, and approximately 120 pounds of lead washers, anchors, and flashing.

PROCESS KNOWLEDGE

The project will include the removal of structural steel, steel decking, and transite asbestos siding that was damaged during the bunker coal fire on January 20, 1992. Removal of the siding will also generate lead washers, anchors, and flashing. The existing structural steel and steel decking is painted with Red Lead Primer, however, the major portion of the paint was burned off from the heat of the fire. The roof and walls are constructed of corrugated asbestos siding that is fastened using 1/4 inch bolts and lead washers. Material used in weatherproofing penetrations and connections between asbestos panels is constructed of 4-inch sheet metal lead flashing.

The area of Construction has never been used for the production of uranium or thorium. There were no hazardous materials stored or spilled in the construction area per References Numbers 2 and 3.

SAMPLING AND ANALYSIS

Sampling and analysis was not required due to the process knowledge available for this project.

RADIOLOGICAL CHARACTERIZATION

The waste to be generated (structural steel, steel decking, asbestos siding, and lead) will require monitoring by the Radiological Safety Group to determination radiological characterization for proper disposal.

RCRA DETERMINATION

The structural steel and steel decking has been painted with Red Lead Primer. The primer is the only potential source of hazardous constituents. Since OAC 3745-51-20(C) [40 CFR 261.20(c)] states that the entire waste must be evaluated, the following calculation is employed to mathematically determine the lead concentration taking into account the entire waste and not just the paint. The calculation is based upon the thickness ratio of paint to metal.

$$TC > V_{TCLP} \cdot (Q_p \cdot h) / ((H \cdot Q_s) + (h \cdot Q_p)) \cdot S\%$$

Where;

TC	=	Regulatory level for lead, 5.0 ppm
V_{TCLP}	=	Analytical value for lead in paint, 50 ppm
h	=	Paint thickness, inches
H	=	Substrate thickness, inches
Q_p	=	Paint density, lb./cu.ft.
Q_s	=	Substrate density, lb./cu.ft.
S%	=	Percent of substrate's surface covered with paint, 100%

Since the density of steel (500 lb./cu.ft.) is approximately the same as the density of paint (482 lb./cu.ft.), the above equation simplifies to the following:

$$TC = (h \cdot TCLP) / (H + h) \quad \text{for 100\% painted surface}$$

An average thickness for paint is 0.010 inch based on other site sampling projects. Engineering data indicates that the thinnest metal to be removed has a thickness of 0.25 inches. The lead concentration in the paint is assumed to be no greater than 50 ppm based on other site paint analyses and this concentration can be assigned as the maximum TCLP value. The TCLP lead value for 0.25 inch thick metal with 0.01 inches of paint with a concentration of 50 ppm is calculated to be 1.92 ppm. The metal waste is therefore classified as RCRA nonhazardous (a.k.a. non-RCRA).

This methodology for characterizing waste coated with lead based paint, Reference Number 4, has been submitted to Ohio EPA for review. A verbal approval for use of this method in RCRA determinations has been received.

D. T. Edwards

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WEMCO:EM:RCRA(FME):92-020

No materials have been identified that would cause the waste from this project to meet any of the hazardous waste listings under OAC 3745-51 (in lieu of 40 CFR 261, Subpart D) or exhibit any of the hazardous waste characteristics under OAC 3745-51-21 to 24 (in lieu of 40 CFR 261.21 to 24) or the revised Toxicity Characteristics under 40 CFR 261.24.

SUMMARY

The rubble waste (concrete, asphalt) and wood waste (railroad ties and shoring) can be disposed of as RCRA nonhazardous (a.k.a. non-RCRA). The plastic, paper, cardboard and protective clothing waste can also be disposed of as RCRA nonhazardous (a.k.a. non-RCRA) if they meet the conditions specified above. These waste will have to be monitored by the Radiological Safety Group for proper radiological disposition per Reference Numbers 1 and 2.

If any additional waste is generated from this project, an additional RCRA determination will be required.

If there are any questions, please contact me at extension 6828 or C. S. Waugh at extension 6777.

C. G. Rieman
C. G. Rieman

Facilities and Materials Evaluation

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Attachments

c w/Attachments

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Central File
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TABLE NUMBER 1
VOLATILE ORGANICS ANALYTICAL RESULTS

VOLATILE ORGANICS	MATRIX	SAMPLE NUMBER AND LOCATION				
		mg/L	mg/L	mg/L	mg/L	mg/L
		920603-184	920603-185	920603-186	920603-189	REGULATORY LEVEL
VINYL CHLORIDE	ASPHALT	<0.15	<0.15	<0.15	<0.15	.20
1,1-DICHLOROETHYLENE	ASPHALT	<0.12	<0.12	<0.12	<0.12	.70
2-BUTANONE (MEK)	ASPHALT	<0.25	<0.25	<0.25	<0.25	200
CHLOROFORM	ASPHALT	<0.12	<0.12	<0.12	<0.12	6.0
CARBON TETRACHLORIDE	ASPHALT	<0.15	<0.15	<0.15	<0.15	.50
BENZENE	ASPHALT	<0.09	<0.09	<0.09	<0.09	.50
1,2-DICHLOROETHANE	ASPHALT	<0.10	<0.10	<0.10	<0.10	.50
TRICHLOROETHYLENE	ASPHALT	<0.22	<0.22	<0.22	<0.22	.50
CHLOROBENZENE	ASPHALT	<0.19	<0.19	<0.19	<0.19	100
TETRACHLOROETHYLENE	ASPHALT	<0.50	<0.50	<0.50	<0.50	.70
1,4-DICHLOROBENZENE	ASPHALT	<0.35	<0.35	<0.35	<0.35	7.5

TABLE NUMBER 1
SEMI-VOLATILE ORGANICS ANALYTICAL RESULTS

SEMI-VOLATILE ORGANICS	MATRIX	SAMPLE NUMBER AND LOCATION				
		mg/L	mg/L	mg/L	mg/L	mg/L
		920603-184	920603-185	920603-186	920603-189	REGULATORY LEVEL
PYRIDINE	ASPHALT	<0.08	<0.08	<0.08	<0.08	5.0
O-CRESOL	ASPHALT	<0.04	<0.04	<0.04	<0.04	200
HEXACHLOROETHANE	ASPHALT	<0.04	<0.04	<0.04	<0.04	3.0
M, P-CRESOL	ASPHALT	<0.04	<0.04	<0.04	<0.04	200
NITROBENZENE	ASPHALT	<0.04	<0.04	<0.04	<0.04	2.0
HEXACHLOROBUTADIENE	ASPHALT	<0.04	<0.04	<0.04	<0.04	0.5
2,4,6-TRICHLOROPHENOL	ASPHALT	<0.04	<0.04	<0.04	<0.04	2.0
2,4,5-TRICHLOROPHENOL	ASPHALT	<0.04	<0.04	<0.04	<0.04	400
2,4-DINITROTOLUENE	ASPHALT	<0.04	<0.04	<0.04	<0.04	0.13
HEXACHLOROBENZENE	ASPHALT	<0.04	<0.04	<0.04	<0.04	0.13
PENTACHLOROPHENOL	ASPHALT	<0.04	<0.04	<0.04	<0.04	100

TABLE NUMBER 2
SEMI-VOLATILE ORGANICS ANALYTICAL RESULTS

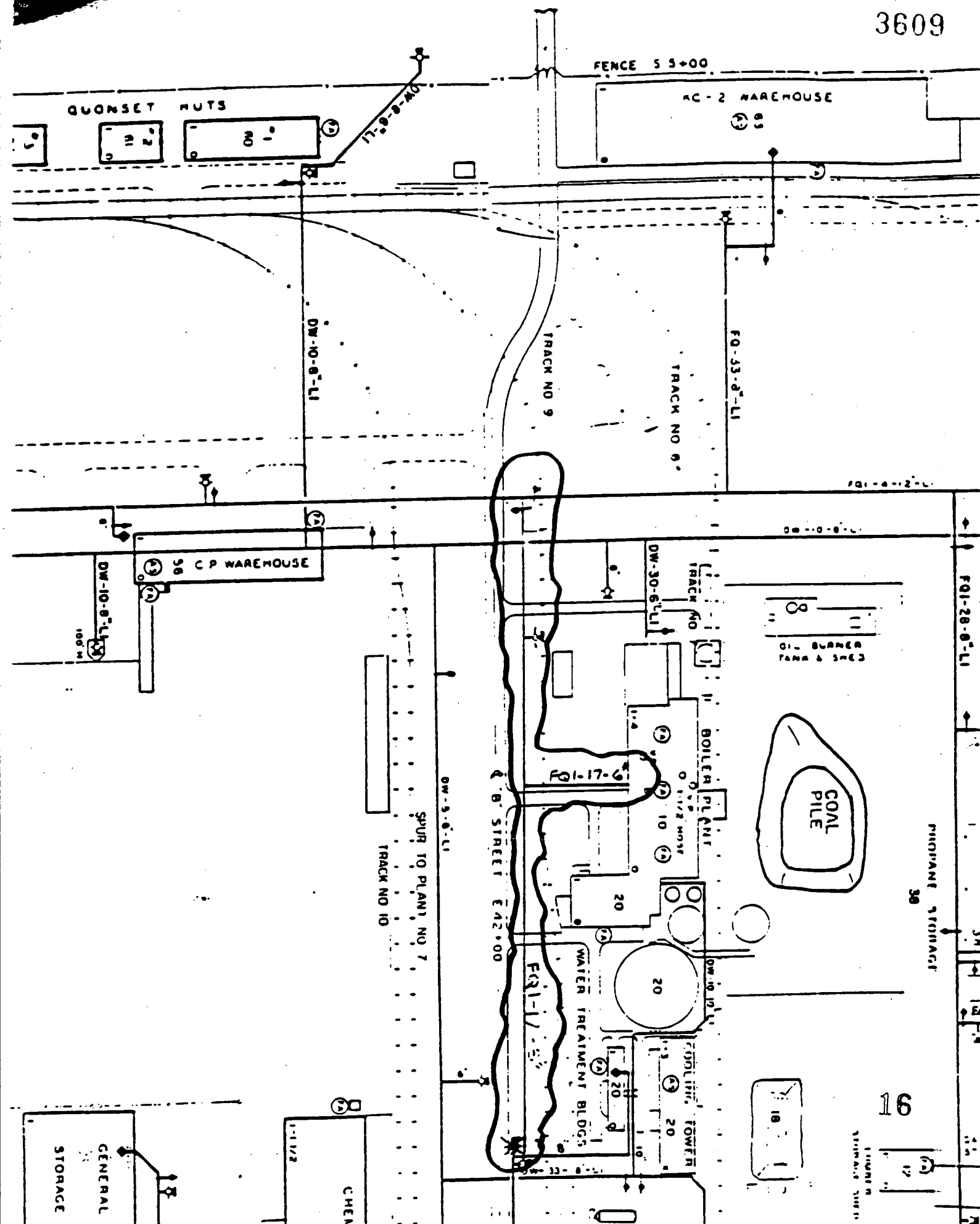
SEMI-VOLATILE ORGANICS	MATRIX	SAMPLE NUMBER AND LOCATION		
		mg/L	mg/L	mg/L
		920603-187	920603-188	REGULATORY LEVEL
PYRIDINE	RAILROAD TIES	<0.08	<0.08	5.0
O-CRESOL	RAILROAD TIES	<0.04	<0.04	200
HEXACHLOROETHANE	RAILROAD TIES	<0.04	<0.04	3.0
M,P-CRESOL	RAILROAD TIES	<0.04	<0.04	200
NITROBENZENE	RAILROAD TIES	<0.04	<0.04	2.0
HEXACHLOROBUTADIENE	RAILROAD TIES	<0.04	<0.04	0.5
2,4,6-TRICHLOROPHENOL	RAILROAD TIES	<0.04	<0.04	2.0
2,4,5-TRICHLOROPHENOL	RAILROAD TIES	<0.04	<0.04	400
2,4-DINITROTOLUENE	RAILROAD TIES	<0.04	<0.04	0.13
HEXACHLOROBENZENE	RAILROAD TIES	<0.04	<0.04	0.13
PENTACHLOROPHENOL	RAILROAD TIES	<0.04	<0.04	100

TABLE NUMBER 2
TCLP METAL ANALYTICAL RESULTS

SEMI-VOLATILE ORGANICS	MATRIX	SAMPLE NUMBER AND LOCATION		
		mg/L	mg/L	mg/L
		920603-187	920603-188	REGULATORY LEVEL
ARSENIC	RAILROAD TIES	<0.010	0.0107	5.0
BARIUM	RAILROAD TIES	0.9484	0.9184	100
CADMIUM	RAILROAD TIES	0.0124	0.0050	1.0
CHROMIUM	RAILROAD TIES	0.0155	<0.010	5.0
LEAD	RAILROAD TIES	0.041	0.012	5.0
MERCURY	RAILROAD TIES	<0.0002	<0.0002	.20
SELENIUM	RAILROAD TIES	<0.005	<0.005	1.0
SILVER	RAILROAD TIES	0.0110	<0.010	5.0

ATTACHMENT NUMBER I
LOCATION OF CONSTRUCTION SITE

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ATTACHMENT NUMBER II
PLASTIC MEF NUMBER 1539

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Attachment 1

MEF # 1539

REV # 1

Plastic materials are considered to be RCRA nonhazardous if the following criteria are met:

- Does not contain any entrapped liquids,
- Spills which may occur on plastic (i.e., tarps) must be cleaned-up according to SOP-20-C-606 and FMPC-503 Procedure before disposal,
- Plastic insulation on electrical wire is not regulated (the wire must be addressed through the metals checklist).
- Plastic containers (i.e., sample jars) must be "empty" as defined by ORC 3745-51-07 in lieu of CFR 40 261.7,

(B)(1) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste in rule 3745-51-31, 3745-51-32, or paragraph (E) of rule 3745-51-33 of the Administrative Code, is empty if:

(a) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating; and

(b) No more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner; or

(c)(i) No more than three percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to one hundred ten gallons in size; or

(ii) No more than 0.3 per cent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than one hundred ten gallons in size.

(2) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.

(3) A container or inner liner removed from a container that has held an acute hazardous waste listed in rule 3745-51-31, 3745-51-32, or paragraph (E) of rule 3745-51-33 of the Administrative Code is empty if:

(a) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

(b) The container or inner liner has been cleansed by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

(c) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.

- See attached list for acutely toxic wastes.

Number	Number	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminocarbonylmethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acetone
P070	118-06-3	Aldicarb
P004	309-00-2	Alene
P005	107-18-6	Allyl alcohol
P006	10859-73-8	Aluminum picramide (R.T)
P007	1763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	104-24-5	4-Aminopyridine
P009	131-74-8	Ambrosium pictum (R)
P119	303-55-6	Ambrosium canadense
P099	106-61-6	Argemone (1,1-dicyano-2), potassium
P010	778-39-4	Arctic acid H ₂ AsO ₄
P012	1327-53-3	Arctic oxide As ₂ O ₃
P011	1303-28-2	Arctic oxide As ₂ O ₃
P011	1303-28-2	Arctic peroxide
P012	1327-53-3	Arctic trioxide
P038	692-42-2	Arzne, diethyl-
P036	696-28-6	Arzne, dichloride, phenyl-
P034	151-36-4	Azidine
P067	75-55-8	Azidine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benazamine, 4-chloro-
P077	100-01-6	Benazamine, 4-amino-
P028	100-44-7	Benazone, tetrachloromethyl-
P042	51-43-4	1,2-Benzeneol, 4-(1-hydroxy-2-(methylviaminomethyl)-, (R)
P046	122-09-8	Benzenethiarnamine, alpha, alpha-dimethyl-
P014	108-98-5	Benzenetriol
P001	81-81-2*	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium
P017	598-31-2	Bromocresolone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-((methylviaminocarbonyl) oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide Ca(CN) ₂
P022	75-15-0	Carbon disulfide
P095	75-44-5	Carbon tetrachloride
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropenitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P030	—	Cyanide (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-39-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylamine
P037	60-57-1	Dielsene
P038	692-42-2	Diethylamine
P041	311-45-5	Diethyl-p-nitrophenyl phosphazene
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4beta,5alpha,8alpha,8beta)-
P060	445-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4beta,5beta,8alpha,8beta)-
P037	60-57-1	2,7,3,6-Dimethanonaphthalene(2,3-b)isourene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,3alpha,3beta,6alpha,6beta,7alpha,7alpha)-
P051	72-20-8*	2,7,3,6-Dimethanonaphthalene(2,3-b)isourene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,3beta,3beta,6alpha,6beta,7beta,7alpha)-, & metabolites
P044	60-51-5	Dimethone
P046	122-09-8	alpha, alpha-Dimethylphenethylamine
P047	534-52-1*	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-83-7	Disonit
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester

Hazardous Waste Number	CAS Abstract Number	Substance
P039	198-04-4	Phosphorothioic acid, O,O-dithiyl S-[2-(ethylnthiomethyl)] ester
P094	198-02-2	Phosphorothioic acid, O,O-dithiyl S-[2-(ethylnthiomethyl)] ester
P044	50-51-5	Phosphorothioic acid, O,O-dithiyl S-[2-(4-methylamino)-2-oxoethyl] ester
P043	15-91-4	Phosphorothioic acid, bis (1-methylthio) ester
P089	15-18-2	Phosphorothioic acid, O,O-dithiyl O-(4-nitrophenyl) ester
P040	137-97-2	Phosphorothioic acid, O,O-dithiyl O-pyridyl ester
P097	12-85-7	Phosphorothioic acid, O-(4-[dimethylaminosulfonyl]phenyl) O,O-dithiyl ester
P071	198-00-0	Phosphorothioic acid, O,O-dithiyl O-(4-nitrophenyl) ester
P110	78-00-2	Plumbane, tetraethyl-
P098	51-50-8	Potassium cyanide
P098	51-50-8	Potassium cyanide K(CN)
P099	106-61-6	Potassium silver cyanide
P070	16-06-3	Propanal, 2-methyl-2-(methylthio)- O-[(methylamino) carbonyloxy]ime
P101	07-12-0	Propanenitrile
P027	142-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	198-31-2	2-Propanone, 1-bromo-
P102	107-10-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
P075	54-11-5*	Pyridine, 3-(1-methyl-2-pyrrolidinyl)- (S), & salts
P114	1039-52-0	Selenious acid, diballium (1-) salt
P103	503-10-4	Selenourea
P104	506-64-9	Silver cyanide --
P104	506-64-9	Silver cyanide Ag(CN)
P105	5628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide Na(CN)
P107	1314-96-1	Strontium sulfide
P107	1314-96-1	Strontium sulfide SrS
P108	57-24-9*	Strychnidin-10-one, & salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	57-24-9*	Strychnine, & salts
P115	1446-18-6	Sulfuric acid, diballium (1-) salt
P109	3689-24-5	Tetraethylthiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetrafluoromethane (R)
P062	57-58-4	Tetraphosphoric acid, hexaethyl ester
P113	314-32-5	Thallic oxide --
P113	314-32-5	Thallium oxide Tl ₂ O ₃
P114	1039-52-0	Thallium(I) selenate
P115	1446-18-6	Thallium(I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofano-
P049	541-53-7	Thionitrodicarbonyl diimide ((H ₂ NIC(S)) ₂ NH
P014	108-98-5	Thiophenol
P116	79-19-6	Thionemcarbonyl
P026	1344-82-1	Thiourea, (2-chlorophenyl)-
P072	86-88-4	Thiourea, 1-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-
P123	1001-35-2	Tosaphene
P118	75-70-7	Trichloromethanol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V ₂ O ₅
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	31-81-2*	Warfarin, & salts, when present at concentrations greater than 0.3%
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN) ₂
P122	314-84-7	Zinc phosphide Zn ₃ P ₂ (R.T.), when present at concentrations greater than 10%

*CAS Number given for parent compound only

Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (toxicity) and R (reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity.

Industry and EPA hazardous waste no.	Hazardous waste	Hazard code
FO20	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
FO21	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of [<i>sic</i>] manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives [<i>sic</i>].	(H)
FO22	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.	(H)
FO23	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
FO26	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.	(H)
FO27	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)	(H)

DEFINITION OF SOLID WASTE - WORKSHEET

This worksheet documents evaluation of this material to determine if it is regulated under RCRA as solid waste under 40 CFR 261.2/OAC 3745-51-02.

A. WASTE STREAM IDENTIFICATION

1. MEF #: 1111/539	2. MTC 003 SRC LA (see MEF for 15 digit lot code)
3. EVALUATOR: Platthe - TSP	4. DATE: 2-15-92

To be regulated as a hazardous waste, a material must first meet the definition of solid waste. Solid wastes are defined as materials that are being "discarded," unless the material is specifically excluded from the definition of solid waste. Materials are considered to be discarded when they are abandoned, recycled in certain manners, or when they are defined by the EPA as inherently waste-like. Section B must be completed to document the status of the material with respect to the definition of solid waste.

B. DEFINITION OF SOLID WASTE

Meets the criteria	Evaluation Criteria																																																					
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	The material is being abandoned by being disposed of, burned or incinerated, or accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated. - 40 CFR 261.2(b)/OAC 3745-51-02(B)																																																					
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<p>If the material is being recycled (i.e., used, reused, or reclaimed) - or accumulated, stored, or treated before recycling - it may be subject to regulation as solid waste. Identify the material type and the type of management for the material by circling the appropriate entry in the table below:</p> <table border="1"> <thead> <tr> <th rowspan="2">Material Type</th> <th colspan="5">Type of Management</th> </tr> <tr> <th>(I) Use constraining disposal (261.2(c)(1)/3745-51-02(C)(1))</th> <th>(II) Energy recovery/fuel (261.2(c)(2)/3745-51-02(C)(2))</th> <th>(III) Reclamation (261.2(c)(3)/3745-51-02(C)(3))</th> <th>(IV) Speculative accumulation (261.2(c)(4)/3745-51-02(C)(4))</th> <th>(V) Exempted use/management activity (261.2(d)/3745-51-02(D))</th> </tr> </thead> <tbody> <tr> <td>Spent Materials</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> </tr> <tr> <td>Sludges (listed in 261.31 or 261.32/OAC 3745-51-31 or 3745-51-32)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> </tr> <tr> <td>Sludges exhibiting a characteristic</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> </tr> <tr> <td>By-products (listed in 261.31 or 261.32/OAC 3745-51-31 or 3745-51-32)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> </tr> <tr> <td>By-products exhibiting a characteristic</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> </tr> <tr> <td>Commercial chemical products (listed in 261.33/OAC 3745-51-33)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> </tr> <tr> <td>Scrap metal</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> <td>(M)</td> </tr> </tbody> </table> <p>If the material type/management combination are identified by (V) then the material is subject to regulation as solid waste. If the material type/management combination are identified by (M) then the material is not subject to regulation as solid waste. Any recycled materials determined not to be regulated as solid waste require additional written documentation supporting their regulatory status. - 40 CFR 261.2(d)/OAC 3745-51-02(F)</p> <p>Additional required documentation attached: _____</p>	Material Type	Type of Management					(I) Use constraining disposal (261.2(c)(1)/3745-51-02(C)(1))	(II) Energy recovery/fuel (261.2(c)(2)/3745-51-02(C)(2))	(III) Reclamation (261.2(c)(3)/3745-51-02(C)(3))	(IV) Speculative accumulation (261.2(c)(4)/3745-51-02(C)(4))	(V) Exempted use/management activity (261.2(d)/3745-51-02(D))	Spent Materials	(M)	(M)	(M)	(M)	(M)	Sludges (listed in 261.31 or 261.32/OAC 3745-51-31 or 3745-51-32)	(M)	(M)	(M)	(M)	(M)	Sludges exhibiting a characteristic	(M)	(M)	(M)	(M)	(M)	By-products (listed in 261.31 or 261.32/OAC 3745-51-31 or 3745-51-32)	(M)	(M)	(M)	(M)	(M)	By-products exhibiting a characteristic	(M)	(M)	(M)	(M)	(M)	Commercial chemical products (listed in 261.33/OAC 3745-51-33)	(M)	(M)	(M)	(M)	(M)	Scrap metal	(M)	(M)	(M)	(M)	(M)
Material Type	Type of Management																																																					
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Sludges exhibiting a characteristic	(M)	(M)	(M)	(M)	(M)																																																	
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By-products exhibiting a characteristic	(M)	(M)	(M)	(M)	(M)																																																	
Commercial chemical products (listed in 261.33/OAC 3745-51-33)	(M)	(M)	(M)	(M)	(M)																																																	
Scrap metal	(M)	(M)	(M)	(M)	(M)																																																	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	The material is inherently waste-like (i.e., identified as hazardous waste F020 - F023, F026 or F028 - 40 CFR 261.2(d)/OAC 3745-51-02(D)).																																																					

CONCLUSIONS TO THE DEFINITION OF SOLID WASTE

The material is subject to a specific exclusion from the definition of solid waste under 40 CFR 261.4/OAC 3745-51-04. See the attached form EXCLUSIONS TO THE DEFINITION OF SOLID AND HAZARDOUS WASTE.

The material is NOT subject to a specific exclusion from the definition of solid waste under 40 CFR 261.4/OAC 3745-51-04.

DIARY STATUS OF THE MATERIAL WITH RESPECT TO THE DEFINITION OF HAZARDOUS WASTE

The material is regulated under RCRA as solid waste.

The material is not regulated under RCRA as solid waste.

This worksheet documents evaluation of this material to determine if it is a listed hazardous waste under 40 CFR 261.31 Subpart D/OAC 3745-51-30 to 33.

A. WASTE STREAM IDENTIFICATION

1. MEF #: 1539	2. MTC 003 SRC NA (see MEF for 15 digit lot codes)
3. EVALUATOR: Matthew Tede	4. DATE: 2-15-92

Large of listed spent solvents in the facility requires explicit evaluation of each waste stream to determine if it meets the listing description of a spent solvent or is regulated as a listed spent solvent by virtue of the mixture or derived from rules. No other listed hazardous waste from non-specific (F-listed; 40 CFR 261.31/OAC 3745-51-31) or specific sources (K-listed; 40 CFR 261.32/OAC 3745-51-32) have been identified at the FEMP to date, however, each waste stream must also be explicitly evaluated to determine if any other F or K listings are potentially applicable. Certain wastes at the FEMP meet the listing description for discarded commercial chemical products, off-specification species, container residues, and spill residues thereof (P or U-listed; 40 CFR 261.33/OAC 3745-51-33) either directly or by virtue of the mixture or derived from rules. Therefore each waste stream must be explicitly evaluated to determine if any P or U listings apply to the waste stream. These evaluations are documented in sections B through D below.

B. LISTED SPENT SOLVENTS

This waste stream does / does not (circle one) contain spent solvents listed under 40 CFR 261.31/OAC 3745-51-31 that were used for their solvent properties, and contained, before use, a total of ten percent or more (by volume) of the following solvent constituents:

- | | |
|---|---|
| <input type="checkbox"/> acetone (F003)
<input type="checkbox"/> benzene (F005)
<input type="checkbox"/> n-butyl alcohol (F003)
<input type="checkbox"/> carbon disulfide (F005)
<input type="checkbox"/> carbon tetrachloride (F001)
<input type="checkbox"/> chlorobenzene (F002)
<input type="checkbox"/> creosols (and cresylic acid) (F004)
<input type="checkbox"/> cyclohexanone (F003)
<input type="checkbox"/> 1,2-dichlorobenzene (F002)
<input type="checkbox"/> diethoxyethanol (also called ethylene glycol monoethyl ether) (F005)
<input type="checkbox"/> ethyl acetate (F003)
<input type="checkbox"/> ethylbenzene (F003)
<input type="checkbox"/> ethyl ether (F003)
<input type="checkbox"/> isobutanol (F005) | <input type="checkbox"/> methylene chloride (F001, F002)
<input type="checkbox"/> methyl ethyl ketone (F003)
<input type="checkbox"/> methyl isobutyl ketone (F003)
<input type="checkbox"/> nitrobenzene (F004)
<input type="checkbox"/> nitropropane (F005)
<input type="checkbox"/> pyridine (F005)
<input type="checkbox"/> perchloroethylene (F001, F002)
<input type="checkbox"/> toluene (F005)
<input type="checkbox"/> 1,1,1-trichloroethane (F001, F002)
<input type="checkbox"/> 1,1,2-trichloroethane (F002)
<input type="checkbox"/> 1,1,2-trichloro-1,1,2-trifluoroethane (F002)
<input type="checkbox"/> trichloroethylene (F001, F002)
<input type="checkbox"/> trichlorotrifluoroethane (F002)
<input type="checkbox"/> xylene (F003) |
|---|---|

Rationale for determination: The material is plastic liners, tarps, etc. and does not contain any spent solvents

C. OTHER LISTED WASTES FROM NON-SPECIFIC AND SPECIFIC SOURCES

This waste stream does / does not (circle one) meet the listing description of a listed hazardous waste from a non-specific or specific source (i.e., F or K-listed waste), either directly or by virtue of the mixture or derived from rules.

Hazardous waste codes identified, if any:

Rationale for determination: This material cannot be mixed with hazardous waste and is not derived from any HWMU.

D. LISTED DISCARDED COMMERCIAL CHEMICAL PRODUCTS

This waste stream does / does not (circle one) meet the listing description of a listed discarded commercial chemical products, off-specification species, container residues, and spill residues thereof (i.e., P and U-listed wastes), either directly or by virtue of the mixture or derived from rules.

Hazardous waste codes identified, if any:

Rationale for determination: Material is not a commercial chemical product.

HAZARDOUS WASTE CHARACTERISTICS - WORKSHEET

This worksheet documents evaluation of this material to determine if it exhibits any of the characteristics of hazardous waste under 40 CFR 261.24 OAC 3745-51-24.

A. WASTE STREAM IDENTIFICATION

1. MEF #:

1539

2. MTC 003 SRC NA

(see MEF for 15 Gps lot number)

3. EVALUATOR:

Matthew Tice

4. DATE:

2-15-92

B. IGNITABILITY (D001)

Exhibits the Characteristic	Evaluation Criteria	Rationale
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It is a liquid, with flash point less than 140 F - 261.21(a)(1) OAC 3745-51-21(A)(1)	Is Not a Liquid
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard - 261.21(a)(2) OAC 3745-51-21(A)(2)	Is Not Reactive
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It is an ignitable compressed gas as defined in 49 CFR 173.300 - 261.21(a)(3) OAC 3745-51-21(A)(3)	Is Not a gas
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It is an oxidizer as defined in 49 CFR 173.151 - 261.21(a)(4) OAC 3745-51-21(A)(4)	Is Not an Oxidizer

C. CORROSIVITY (D002)

Exhibits the Characteristic	Evaluation Criteria	Rationale
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It is aqueous and has pH of less than or equal to 2 - 261.22(a)(1) OAC 3745-51-22(A)(1)	Is Not Liquid
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It is aqueous and has pH of greater than or equal to 12.5 - 261.22(a)(1) OAC 3745-51-22(A)(1)	Is Not Liquid
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It is a liquid and corrodes steel (SAE 1020) at a rate greater than 1/4 inch per year at a test temperature of 130 F as determined by the NACE test method - 261.22(a)(2) OAC 3745-51-22(A)(2)	Is Not Liquid

D. REACTIVITY (D003)

Exhibits the Characteristic	Evaluation Criteria	Rationale
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It is normally unstable and readily undergoes violent change without detonating - 261.23(a)(1) OAC 3745-51-23(A)(1)	Is Not a Reactive Substance
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It reacts violently with water - 261.23(a)(2) OAC 3745-51-23(A)(2)	"
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It forms potentially explosive mixtures with water - 261.23(a)(3) OAC 3745-51-23(A)(3)	"
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment - 261.23(a)(4) OAC 3745-51-23(A)(4)	"
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment - 261.23(a)(5) OAC 3745-51-23(A)(5)	"
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement - 261.23(a)(6) OAC 3745-51-23(A)(6)	"
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure - 261.23(a)(7) OAC 3745-51-23(A)(7)	"
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	It is a forbidden explosive as defined in 49 CFR 171.51, or a Class A explosive as defined in 49 CFR 173.53 or a Class B explosive as defined in 49 CFR 173.83 - 261.23(a)(8) OAC 3745-51-23(A)(8)	"

HAZARDOUS WASTE CHARACTERISTICS - WORKSHEET

3609

This worksheet documents evaluation of this material to determine if it exhibits any of the characteristics of hazardous waste under 40 CFR 261.21 to 261.23/DAC 3745-51-21 to 3745-51-23.

A. WASTE STREAM IDENTIFICATION

1. MEF #:

1539

2. MTC: 003 SEC: NA

(see MCTP for IS & IS lot codes)

3. EVALUATOR:

MATTHEW TEDE

4. DATE:

2-15-92

B. TOXICITY CHARACTERISTICS

Exhibits the Characteristic	HW Code	Constituent	TCLP Concentration (ppm)	Rationale
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D004	arsenic	5.0	The material is plastic and does not contain TCLP metals.
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D005	barium	100.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D006	cadmium	1.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D007	chromium	5.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D008	lead	5.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D009	mercury	0.2	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D010	selenium	1.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D011	silver	5.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D018	benzene	0.5	Material is not a volatile organic.
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D019	carbon tetrachloride	0.5	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D021	chlorobenzene	100.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D022	chloroform	6.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D028	1,2-dichloroethane	0.5	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D029	1,1-dichloroethylene	0.7	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D035	methyl ethyl ketone	200.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D039	tetrachloroethylene	0.7	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D040	trichloroethylene	0.5	Material is not a Semi-Volatile organic
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D043	vinyl chloride	0.2	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D023	o-cresol	200.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D024	m-cresol	200.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D025	p-cresol	200.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D026	cresol	200.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D027	dichlorobenzene	7.5	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D030	2,4-dinitrotoluene	0.13	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D032	hexachlorobenzene	0.13	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D033	hexachlorobutadiene	0.5	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D034	hexachloroethane	3.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D036	nitrobenzene	2.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D037	pentachlorophenol	100.0	Material does not contain pesticides
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D038	pyridine	5.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D041	2,4,5-trichlorophenol	400.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D042	2,4,6-trichlorophenol	2.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D012	Endrin	0.02	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D013	Lindane	0.4	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D014	Methoxychlor	10.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D015	Toxaphene	0.5	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D016	2,4-D	10.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D017	2,4,5-TP Silver	1.0	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D020	Chlordane	0.03	
<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	D031	Heptachlor	0.008	

MATERIAL EVALUATION REVIEW

Newly Generated Waste Final Determination

MEF No.: 1539MTC: 003 SRC: N/A

PREPARED BY: _____ DATE: _____

REVIEW:TECHNICAL: *[Signature]* DATE: 2-12-92EXTERNAL: *[Signature]* DATE: 2-12-92MANAGEMENT: *[Signature]* DATE: 2/13/92**COMMENTS:**(Initial any comments made below):

* * - Must complete the Determination
worksheets